Family Medicine

Family Theory and Family Health Research

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SUMMARY

Different family theories can be applied to different aspects of how families experience health and illness. The family health and illness cycle describes the phases of a family's experience, beginning with health promotion and risk reduction, then family vulnerability and disease onset or relapse, family illness appraisal, family acute response, and finally family adaptation to illness and recovery. For each phase, specific family theories that are most appropriate for aviding family and health research are discussed.

RÉSUMÉ

Différentes théories sur la famille peuvent s'appliquer aux différents aspects du vécu des familles dans la santé et la maladie. Le cycle familial de la santé et de la maladie décrit les phases d'une expérience familiale, débutant par la promotion de la santé et la diminution des risques, puis la vulnérabilité de la famille et l'apparition ou la récidive d'une maladie, l'évaluation de la maladie familiale, la réaction familiale ajavë, et finalement l'adaptation familiale à la maladie et le rétablissement. Pour chaque phase, l'auteur discute des théories familiales spécifiques qui sont le plus appropriées pour orienter la recherche sur la famille et la

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AMILY SCIENCE THEORY AND practice and primary health care theory and practice have developed from two separate traditions. The roots of family

science lie primarily in the sociological and systems theories of the 20th century, whereas primary health care has practice roots as old as medicine itself but has theoretical roots as young as family medicine's emergence in the late 1960s.

The growing relationship between the two fields represents an alliance that is historically unprecedented with potentially far-reaching effects, but the relationship remains tentative and uncertain. Although primary health care has much to offer family science – particularly through sharing its biopsychosocial orientation – the focus of this article is on what family theories can offer primary health care practice and theory.

There is no central, dominant family theory, but rather a collection of theories focusing on different aspects of family relationships. Family science speaks in numerous theoretical languages, which, although not as diverse as the builders of the Tower of Babel, can be quite confusing for the uninitiated. Different theories can focus on issues, such as how families function in the larger society, how families create shared

Dr Doherty is Professor and director of Graduate Studies in the Family Social Science Department, University of Minnesota, St Paul, Minn. meanings, how families change over time, how families handle stress and resolve conflicts, and how families develop habitual patterns of interaction. Each theory represents a different intellectual heritage that can make communication difficult within the family science field, let alone with those outside the field.

Perhaps the most important lesson to be learned from all family theories is that the individual who is devoid of social context – the prototypical patient in medical training – does not exist in nature. Individuals in all cultures are born into families, and most spend their lives interacting with family members. Even a socially isolated individual can be defined in terms of the lack of a supportive family. We derive from our families our genetic and psychosocial programs, our adult identities, and our primary social support. Each person is both unique and representative of an intimate social group.²

A central implication of this idea for primary health care is that families are an inherent and inevitable participant in the prevention and treatment of diseases and health problems. Doherty and Baird³ refer to the "therapeutic triangle" in all health care, that is, the notion that the family is always a third party to health care encounters between patients and health professionals. Empirical support for this idea is abundant: families are the primary source of health-related behavior patterns, of the

Figure 1. FAMILY HEALTH AND ILLNESS CYCLE Care System Health Health Adaptation **Promotion** to Illness and and Risk Recovery Reduction **Vulnerability** Acute and Disease Response Onset or Relapse Illness **Appraisal**

initial assessment of individuals' health problems, of the decision to get medical care, of health beliefs and attitudes influencing compliance with medical regimens, and of social support for chronic health problems.4-6

Although the role of families in health care is incontrovertible, family theories have only recently been applied systematically to the family's role in prevention, treatment, and rehabilitation. The first step toward this application must be to organize the family and health literature in a theoretically meaningful way.

The family health and illness cycle

I developed the family health and illness cycle to help organize both family and health research literature and family longitudinal experience with health and illness. The version presented here is described more fully in Families and Health.⁵ The model (Figure 1) is read by beginning with "health promotion and risk reduction." The circular arrows represent the flow of the family's experience; the two-way arrows represent the family's interactions with the health care system. The cycle can be viewed as a family health care map onto which family theory can be placed. The category "health promotion and risk reduction" refers to family beliefs and behavior patterns that either help family members stay healthy or put them at long-term risk for developing disease. Many studies have examined the family's role in dietary practices, exercise patterns, and cigarette smoking – the three lifestyle behavior patterns believed to have the strongest links to health and disease.^{7,8} In addition to this emphasis on specific health practices, family health promotion and risk reduction concerns more general dimensions of family life that orient family members toward

health or illness, for example, the family's cohesion and its sense that the world is coherent and predictable. The family never operates in isolation from the health care system and from the rest of society. Families are influenced particularly by health care professionals and those they encounter in the media, as well as by other families in their peer group.

The next category, "vulnerability and disease onset or relapse," refers to life events and experiences of the family that make family members more susceptible to becoming ill or to having a relapse of a chronic illness. The principal body of research on this topic examines how family stress, stemming from either internal or external events, makes family members susceptible. For example, Meyer and Haggerty¹⁰ found that streptococcal infections in children were likely to be preceded by a stressful event in the family. Beautrais et al11 reported that stressful family events strongly predicted visits to physicians and hospitalizations. An example of how family stress can cause a relapse from a chronic disease is the well-documented impact of family "affective style" on relapse in young adult schizophrenics following hospitalization.¹²

"Illness appraisal" refers to family beliefs about a family member's illness and to family decisions about how to deal with the illness. This is the family's gatekeeping function vis-à-vis the health care system. A long tradition in medical sociology and medical anthropology attests to the family's role in verifying and legitimizing an individual's sickness; in explaining why the individual became sick; and in deciding whether medical advice is needed, whether the matter should be handled within the family, or whether it should be handled by a lay referral network.^{13,14} Of course, these family decisions occur within a context of the availability and accessibility of health care. Family appraisals are often made in interaction with, or in conflict with, the appraisals of health professionals.5

The next part of the cycle, "acute response," refers to the aftermath of the illness for the family. This family experience is likely to be tied closely to family illness appraisal, because the early response to an illness episode is influenced by the family's assessment of its seriousness. An example

of acute response would be the adjustments a family must make immediately after a heart attack or cancer surgery. When the illness is disabling or life-threatening, the family is apt to experience a crisis, ie, a period of disorganization in which normal coping patterns are inadequate. ¹⁵ Under these circumstances, the family can assemble its extended kin network for vigils at the bedside of the sick member and for support in the daily household functions. For less serious problems, the family's acute response might be limited to someone's staying home with a sick member or to a period of worry about a member's health.

"Adaptation to illness and recovery," refers to how a family reorganizes itself around a chronic illness or disability of a family member and to the ways that a family adapts to the recovery of an ill member. During this phase, the family must promote the continued recovery or stabilization of the family member's health while simultaneously maintaining its ability to nurture other family members and maintain its place in the community. In chronic illness, families must also manage long-term, complex relationships with health care professionals and with institutions, such as insurance companies and government agencies. This process of family adaptation has been the most extensively studied in family and health, usually taking the form of assessing how families cope with medical illness.¹⁶ The adaptation phase also offers serious challenges for primary health professionals who must develop positive, long-term relationships with these families.

Theory and the family health and illness cycle

There is no fully comprehensive theory of the family, only partial theories with particular emphasis or conceptual "lenses." Criteria for the inclusion of the following theories (*Table 1*) are that the theory focuses on the family as a unit, that its scope is reasonably broad, and that it has a substantial body of literature on the subject of family.

Health promotion and risk reduction. Family health promotion and risk reduction is best studied from a family systems theory perspective.¹⁷⁻²⁰ and from a family development theory perspective.^{21,22}

Table 1.	FAMILY	THEORIES	AND	THE	FAMILY	
HEAL	TH AND	ILLNESS C	YCLE			

FAMILY HEALTH DIMENSIONS	FAMILY THEORIES			
Health Promotion and risk reduction	Systems			
	Developmental			
Vulnerability and disease onset	Stress			
Appraisal	Symbolic interactionism			
astrocks.	Constructivist			
Acute response	Stress			
Adaptation to illness or recovery	Systems			
	developmental			
	Constructivist			
	Stress and coping			

Family systems theory focuses on repeating patterns of interaction whereby families create stable identities. Although the family systems theory has been applied most extensively to dysfunctional family dynamics, it can be readily applied to the role of health behaviors in family relationships. Doherty and Whitehead²³ and Whitehead and Doherty,24 for example, have examined how cigarette smoking becomes a vehicle for inclusion or exclusion patterns and power and control issues in family relationships. Family systems theory goes beyond simplistic notions of modeling health behaviors to demonstrate how practices, such as diet, exercise, and smoking, are incorporated into stable family patterns that are difficult to change with simple education and advice.

Family development theory is a useful complement to family systems theory in studying families during the health promotion and risk reduction phase. Whereas family systems theory deals primarily with the immediate interactional context of health behaviors, family development theory deals with the family longitudinally - particularly its major transitions of adding and losing members and the aging of family members.21,22 This theory can help one to understand the particular challenges facing families in promoting health at different times in the family life cycle. There can be times, for example, when families are particularly oriented to changing health practices, such as

after the birth of a first child or after the death of a family member. Similarly, difficulty in handling major family transitions, such as divorce and retirement, can make a family less competent in promoting health and reducing risks.

Vulnerability. This phase is best addressed by family stress theory (originally by sociologist Reuben Hill¹⁵ and most recently by Boss²⁵ and McCubbin and Patterson²⁶). Family stress theory describes how environmental or internal demands can extend a family beyond instability in caring for its members, which can lead to a crisis or breakdown in the family. It goes beyond psychological stress theory by emphasizing how stressors exert a disorganizing influence on families, requiring a reorganization in order to move beyond the crisis. An obvious implication for health and illness is the role of family stress in exacerbating the vulnerability of family members to illness and injury. The well-known Holmes and Rahe scale,²⁷ which ranks and measures stressful life changes, includes death of a family member, divorce, and serious illness of a family member at the top of the list. Family stress theory also emphasizes how family resources alleviate the negative impact of stressful events and how the family's definition of the situation determines the family's response.25

Appraisal. The illness appraisal can be examined within the framework of two types of family theory: symbolic interactionism and constructivist (attribution) theories. Symbolic interactionism^{2,28} is a sociological theory that emphasizes how individuals and families create meanings in their environment and act out roles based on these meanings. Meanings and roles are developed through interactions among family members and through interactions with society. A family's experience with certain symptoms and illnesses becomes crystallized in symbolic images related to threat and safety. This can lead to idiosyncratic family actions that can be difficult for professionals to fully understand; for example, if a family member has experienced spinal meningitis subsequent to headache symptoms, family members might overreact each time a child gets a headache,5 or how

a mother defines motherhood can affect how she will manage her ill child – by herself or by a health professional. Families also operate from their "symbol system" in appraising the competence and trustworthiness of health professionals. The symbolic interaction theory offers physicians insight into family functioning with health and illness.

Family constructivist theories also deal with meanings, but they focus more on total family meanings, as opposed to individual meanings. 9,29 Family constructivist theories have emphasized how families construe their relationship with society, particularly the extent to which society is viewed as predictable, orderly, and trustworthy, and how families believe they should orient themselves to this environment, for example, by active, coordinated engagement or by separate individual responses. A growing body of research about this theory has been examining the influence of these family constructions on how families manage chronic illness and relate to health professionals.

Acute response. The acute response phase is best understood by family stress theory. The family's actions reflect the four factors outlined by Hill¹⁵ in his classic formulation of family stress theory: 1) the stressful event (illness); 2) the family's resources for dealing with the event (eg, financial, social, psychological); 3) the family's definition of the event (eg, catastrophic, manageable, potentially helpful); and 4) the degree of crisis. This theoretical framework can be applied to studies of how families respond to a serious new diagnosis or the sudden onset of a life-threatening or disabling illness.

Adaptation. The adaptation phase can be viewed from a variety of theoretical perspectives. As mentioned before, it is the most extensively studied area in the family health and illness cycle. Systems theory can be applied to the understanding of how families stabilize around new interaction patterns after an illness or after the acute phase of treatment and of how they interact with health professionals.⁵ Family development theory also provides a necessary view of how the family's position in its life cycle interacts with health issues. For example, spinal cord injuries occur most often in young adults or in

families who are beginning the family life cycle; these families get stuck on the launching pad, which has implications for all family members. Family constructivist theory can contribute an understanding of how a family's paradigm for viewing itself in relation to the social milieu influences how it manages a chronic illness and how it interacts with health professionals.³⁰

The fourth theory that applies to the adaptation phase is McCubbin and Patterson's family stress and coping theory.²⁶ This theory goes beyond Hill's more acute crisis-oriented model to focus on families' adaptation skills after a crisis or a disrupting event. In this model it is important to consider other stressful life events that occur while the family is adjusting to a serious illness; the family's new resources during the adjustment period; the family's perception of the new situation; the family's level of functional and dysfunctional coping; and the family's overall adaptation. The family stress and coping theory seems especially useful for understanding the multiple factors over time in a family's experience with chronic illness.

Conclusion

There are several limitations to the family health and illness cycle. First, the cycle deals with the family's experience of a particular member's illness, not the complex dynamics created by multiple illnesses. Second, the cycle is more elaborate in the illness area than in the prevention and health promotion area. Third, the cycle does not deal explicitly with the family's interactions with other important social groups aside from health professionals. Fourth, the cycle separates processes that can overlap or occur simultaneously in certain situations. Even with these limitations, however, the family health and illness cycle does seem to serve as an adequate vehicle to organize the hundreds of studies that exist on families and health. Virtually all of these studies can be viewed as focusing on one of the dimensions in the model. This is a beginner's map for family health researchers to guide their selection of family theories.

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SERC°

(Betahistine hydrochloride) TABLETS

INDICATIONS: SERC may be of value in reducing the episodes of vertigo in Meniere's disease. No claim is made for the effectiveness of SERC in the symptomatic treatment of any form of vertigo other than that associated with Meniere's disease. It also has not been established that betahistine has any effect on other manifestations of Meniere's disease.

CONTRAINDICATIONS: Several patients with a history of peptic ulcer have experienced an exacerbation of symptoms while using SERC. Although no causal relation has been established, SERC is contraindicated in the presence of peptic ulcer and in patients with a history of this condition. SERC is also contraindicated in patients with pheochromocytoma.

PRECAUTIONS: Although clinical intolerance to SERC by patients with bronchial asthma has not been demonstrated, caution should be exercised if the drug is used in these patients.

SERC should not be used concurrently with antihistamine agents, since no information is available with regard to the possible interaction of these drugs.

USE IN PREGNANCY: The safety of SERC in pregnancy has not been established. Therefore, its use in pregnancy or lactation, or in women of child-bearing age requires that its potential benefits be weighed against the possible risks.

ADVERSE REACTIONS: Occasional patients have experienced gastric upset, nausea and headache.

DOSAGE AND ADMINISTRATION: The usual adult dosage has been one to two tablets (4 mg each) administered orally three times a day. The dosage has ranged from two tablets per day to eight tablets per day. No more than eight tablets are recommended to be taken in any one day.

SERC (betahistine hydrochloride) is not recommended for use in children. As with all drugs, SERC should be kept out of reach of children.

HOW SUPPLIED: Scored tablets of 4 mg each in bottles of 100 tablets.

Full Product Monograph available upon request.

REFERENCES:

- NORRIS, C.H.; Drugs, 1988, V. 36/6, P. 754-772, "Drugs Affecting the Inner Ear A Review".
- 2. OOSTERVELD, W.J.; et al.; J. of Drug Research, 1989, 14, 4, P. 122-126, "Betahistine vs Placebo in Paroxysmal Vertigo".
- OOSTERVELD, W.J.; J. Laryngol. Otol., 1984, 98: 37-41, "Betahistine in the Treatment of Vertigo of Peripheral Vestibular Origin. A Double-Blind Placebo-Controlled Study".
- BERTRAND, R.A.; Adv. Oto-Rhino-Laryngo., 28, 1982, P. 104-110, "Long Term Evaluation of the Treatment of Meniere's Disease with Betahistine HCL".



References

- 1. Burr WR, Hill R, Nyc FI, Reiss IL. Contemporary theories about the family. Vol 2. New York, NY: The Free Press, 1979.
- 2. Mead GH. Mind, self and society. Chicago, Ill: University of Chicago Press, 1934.
- 3. Doherty WJ, Baird MA. Family therapy and family medicine: toward the primary care of families. New York, NY: Guilford Press, 1983.
- Christie-Seely J, editor. Working with families in primary care. New York, NY: Praeger, 1984.
- 5. Doherty WJ, Campbell TL. Families and health. Newbury Park, Calif: Sage, 1988.
- Litman TJ. The family as a basic unit in health and medical care: a social-behavioral overview. Soc Sci Med 1974;8:495-519.
- National Center for Health Statistics. Health, United States. Washington, DC: Public Health Service, US Government Printing Office; 1984 DHHS Publication No.: (PHS) 185-1232.
- 8. Council on Scientific Affairs. Dietary and pharmacologic therapy for lipid risk factors. *JAMA* 1983;250:1873-9.
- Reiss D. The family's construction of reality.
 Cambridge, Mass: Harvard University Press, 1981.
- Meyer RJ, Haggerty RJ. Streptococcal infections in families: factors affecting individual susceptibility. *Pediatrics* 1962;29:539-49.
- 11. Beautrais AL, Fergusson DM, Shannon FT. Life events and childhood morbidity: a prospective study. *Pediatrics* 1982;70:935-40.
- 12. Doane JA, Falloon IRH, Goldstein MJ, Mintz J. Parental affective style and the treatment of schizophrenia: predicting course of illness and social functioning. *Arch Gen Psychiatry* 1985;42:34-42.
- Eisenberg L, Kleinman A. The relevance of social science for medicine. Boston, Mass: D Reidel, 1981.
- 14. Gottlieb BH. Lay influences on the utilization and provision of health services: a review. *Can Psychol Rev* 1976:17:126-36.
- 15. Hill R. Generic features of families under stress. *Soc Casework* 1958;39:139-59.
- 16. Patterson JM, McCubbin HI. Chronic illness: family stress and coping. In: Figley CR, McCubbin HI, editors. Stress and the family. Coping with catastrophe. Vol 2. New York, NY: Brunner/Mazel, 1983:21-36.
- 17. Broderick C, Smith J. The general systems approach to the family. In: Burr WR, Hill R, Nye FI, Reiss IL, editors. *Contemporary theories about the family*. Vol 2. New York, NY: The Free Press, 1979:112-29.
- 18. Constantine LC. Family paradigms. New York, NY: Guilford Press, 1986.
- 19. Minuchin S. Families and family therapy. Cambridge, Mass: Harvard University Press, 1974.
- 20. Bowen M. Family therapy in clinical practice. New York, NY: Jason Aronson, 1978.
- 21. Aldous J. Family careers: developmental change in families. New York, NY: Wiley, 1978.
- 22. Mattessich P, Hill R. Life cycle and family development. In: Sussman MB, Steinmetz SK, editors. *Handbook of marriage and*

- the family. New York, NY: Plenum Press, 1987:437-69.
- 23. Doherty WJ, Whitehead D. The social dynamics of cigarette smoking: a family FIRO analysis. *Fam Process* 1986;25:453-9.
- Whitehead D, Doherty WJ. Systems dynamics in cigarette smoking: an exploratory study. Fam Systems Med 1989;7:264-73.
- 25. Boss PG. Family stress management. Newbury Park, Calif: Sage, 1988.
- 26. McCubbin HI, Patterson JM. The family stress process: the double ABCX model of adjustment and adaptation. In: McCubbin HI, Sussman MB, Patterson JM, editors. Social stress and the family: advances and developments in family stress theory and research. New York, NY: Haworth Press, 1983:12-25.
- 27. Holmes TH, Rahe RH. The social readjustment scale. J Psychosom Res 1967;39:413-31.
- 28. Burr WR, Leight GK, Day RD, Constantine J. Symbolic interaction and the family. In: Burr WR, Hill R, Nye FI, Reiss IL, editors. *Contemporary theories about the family*. Vol 2. New York, NY: The Free Press, 1979;42-111.
- Steinglass P, Bennett LA, Wolin SJ, Reiss D. *The alcoholic family*. New York, NY: Basic Books, 1987.
- Reiss D, De-Nour AK. The family and medical team in chronic illness: a transactional and developmental perspective. In: Ramsey CN, editor. Family systems in medicine. New York, NY: Guilford Press, 1989:435-44.

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